

What is Claimed is:

1. A preparation method of immunoglobulin Y (IgY) against dental caries bacteria, including the steps of preparing streptococcus mutans antigens which are streptococcus streptococcus mutans type c and type d as antigen bacteria, immunizing
5 hens, and extracting IgY by water dilution, DEAE-Sephadex A50 and Sephadex G200 chromatography.
2. The preparation method as recited in claim 1 wherein said streptococcus mutans type c and d as antigen bacteria are mixed by ratio 2:1.
3. The preparation method as recited in claim 1 wherein in the extracting step
10 further includes the steps of extracting eluted IgY by water dilution, adding 4-6 fold distilled water into even yolk by stirring, adjusting pH to 4.5-6.5, stand at 3-5°C, and centrifuging at high speed for 20 minutes
4. The preparation method as recited in claim 1 wherein an eluant which is a phosphate buffer containing 0.03-0.1M of NaCl is used for DEAE-Sephadex A50
15 chromatography.
5. The preparation method as recited in claim 1 wherein an eluant which is a phosphate buffer containing 0.07M of NaCl is used for DEAE-Sephadex A50 chromatography.
6. The preparation method as recited in claim 1 wherein an eluant which is a
20 phosphate buffer containing 0.05-0.2M of NaCl is used for Sephadex G200 chromatography.
7. The preparation method as recited in claim 1 wherein an eluant which is a phosphate buffer containing 0.1M of NaCl is used for Sephadex G200 chromatography.
8. A combination against dental caries bacteria, comprising an IgY to dental
25 caries bacteria and, at last, one of both potassium sorbate and sodium benzoate.

9. The combination as recited in claim 8 wherein an additive amount of said IgY is at least 0.05% and an additive amount potassium sorbate and sodium benzoate is 0.005-0.02%.

10. The combination as recited in claim 9 wherein an additive amount of said IgY is 0.05-0.2%.

11. The combination as recited in claim 8 wherein said combination is packaged in pocket atomizer for spraying usage.

12. The combination as recited in claim 8 wherein said combination is made in liquid form and packaged in a sucking bottle.

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